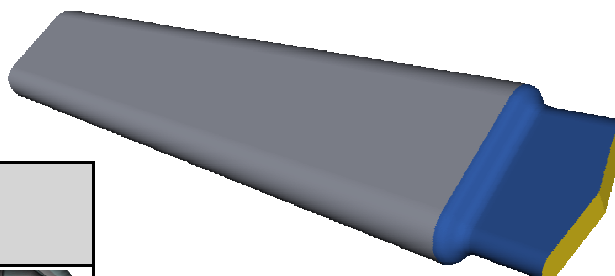


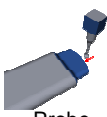
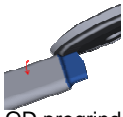







## Punching Tool L120 oval 5.8x22.8

### A20-210

This punching tool is used in holepunching of aluminum blinds. Besides the surface, the geometry of the collet need to fit the required radii geometry. The oval form is generated using a form wheel for the excentric rotatif grinding process - successively incrementing radially. For optimizing the surface a second wheel with finer grain is used.



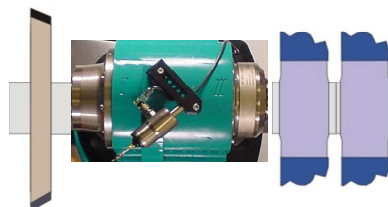
### 1. Cycletime for Production

Workpiece: L120xB7.5xH25 Material HSS					
Operations					
Feed [mm/Min]	2000	800	800	20	20
tot.Inc/inc or Power [kW]		1/0.015	0.02/0.002	2	2
Cutting speed [m/s]		36	36	32	32
Used wheels					
Grinding time [s]	12	583	88	58	58
Total cycle time	13 Min 19				

The cycle times are indicative. Material to be ground, grinding wheels, coolants can influence the cycle times considerably.

### 2. Used Grinding Wheels

1	DXF Ø125 C80
2	DXF Ø125 C180
3	1V1 Ø150 B126



3

2

1

### 3. Machine and Software Requirements

Machines: 5 axes CNC grinders : NORMA CFG

Control: Fanuc 31i

Accessories: Dresser, special Clamping

Responsible engineer: OP, 21.1.14

Coolant: Synthetic Oil, pressure 6 bar

Software: Quinto 5

[www.schneeberger.ch](http://www.schneeberger.ch)

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